



# HF Happenings 833

Volume 17, Issue 43, the week of 4 February 2019

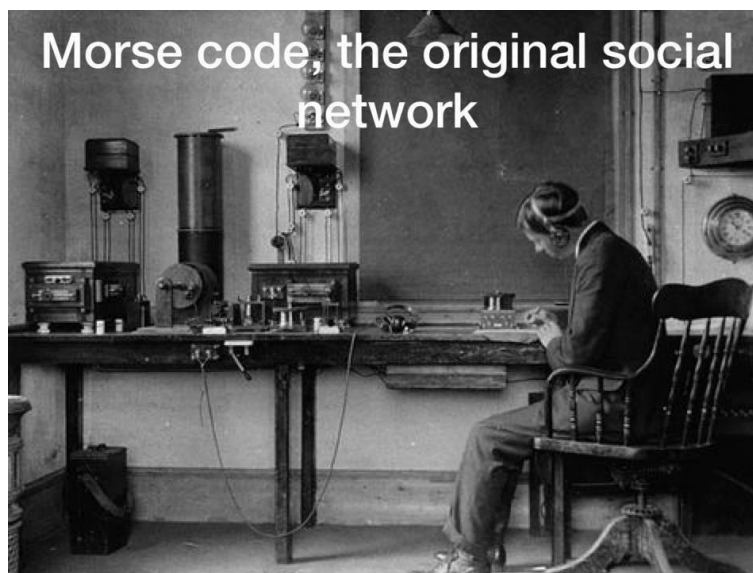
You can now download your copy of HF Happenings from [www.sarl.org.za/hf\\_happenings.asp](http://www.sarl.org.za/hf_happenings.asp)

Southern African Fauna and Flora <https://zsfaunaandflora.wordpress.com/>

ZS SOTA <https://zssota.wordpress.com>

5 MHz (60 metre) allocations <http://www.sarl.org.za/public/contests/contestrules.asp>

[https://en.wikipedia.org/wiki/60-meter\\_band#External\\_links](https://en.wikipedia.org/wiki/60-meter_band#External_links)



## DXCC's Most Wanted – ClubLog

The "DXCC Most Wanted" entities list has been updated on ClubLog as of 29 January. The list contains 340 entities and here are the top 10 entities:

1. P5 DPRK (North Korea)
2. 3Y/B Bouvet Island
3. FT5/W Crozet Island
4. CE0X San Felix Islands
5. BS7H Scarborough Reef
6. BV9P Pratas Island
7. KH7K Kure Island
8. KH3 Johnston Island
9. FT5/X Kerguelen Island
10. 3Y/P Peter 1 Island

Four changes this month. San Felix Islands (CE0X) and Scarborough Reef (BS7H) switched places in the 4<sup>th</sup> and 5<sup>th</sup> position. Kerguelen Island (FT5/X) moved from number 10 to number 9 and Macquarie Island (VKOM) dropped to 11 and Peter 1 Island (3Y/P) moved into number 10. The complete "DXCC Most Wanted" entities list is available at <https://secure.clublog.org/mostwanted.php>

## Year-long activities

Gary, ZL2IFB, writes: "You might spare a paragraph for the annual DX challenges - in particular the CQ DX Marathon <http://www.dxmarathon.com/> and others such as the CDXC DX Marathon Challenge <https://clublog.org/league.php?cdxc-marathon=1> and of course the ARRL International Grid Chase <https://igc.arrl.org/>. These are year-long competitions, akin to running marathons as opposed to sprints. The idea is to work the world in the course of the calendar year. Unlike the frantic dash to make QSOs in the few hours of a typical contest, the challenges are more laid-back affairs, but no less competitive. Whenever fresh

## February

4 - World Cancer Day; Closing date for QRP contest logs

7 to 10 - Up the Creek Music Festival, Swellendam

8 and 9 - SARL Council Strategic Meeting, NARC

9 - VHF/UHF Workshop, NARC

9 and 10 - National Field Day; CQ WW WPX RTTY Contest; PACC Contest (The Netherlands)

11 - International Day for Women and Girls in Science

13 - World Radio Day

14 - Valentine's Day

15 - Closing date for PEARS VHF logs

16 and 17 - ARRL DX CW Contest

18 - Closing date NFD logs; Closing date for AWA CW Activity Day logs

19 - Highway ARC Monthly Meeting

21 - The sinking of the SS Mendi - 05:00 21 February 1917

22 - Closing date for March Radio ZS

23 and 24 - Clarens Craft Beer Festival

23 - West Rand Flea Market

24 - SARL RTTY Contest

27 - International Milk Tart Day

28 - Closing date for SARL Hall of Fame nominations; closing date for AMSAT SA Space Symposium early bird registration

meat appears on the bands in the form of a new DXpedition or other exotica such as Monk Apollo and 4U1UN, challenge entrants gunning for a podium finish are usually among the first to work them just in case they quickly go QRT (as happened to TT8KO). Challengers also participate in contests to fill empty band-mode slots or simply for the fun of it. Most of the year, though, is spent in regular DXing, chatting with pals and other challenge entrants in the friendly global DX community. Being global affairs, there are mini-challenges-within-challenges to win individual modes, bands, continents, countries and clubs. There is plenty of room for QRPers, remote station ops, conventional contesters, corporate slaves, HOA cave-dwellers and others. Club Log makes it easy to track and motivate performance during the year. Have you got the stamina to make it to the finish line?"

### Logging programs for digital modes

Scott, N3FJP, has updated his suite of logging programs for digital modes <http://www.n3fjp.com/upgradestepscontest.html> to include compatibility with VK3AMA's JTAAlert software <https://hamapps.com/>. He is also made significant changes to his *State QSO Party* programs. See his website for more information <http://www.n3fjp.com/news/news2018-09-21.html>.

### multiFlex, a new feature

Flex Radio Systems has announced a new feature, multiFlex, which enables two operators to use a single Flex Radio Systems transceiver simultaneously. This has immediate applicability in the multi-1, multi-2, and multi-multi contesting categories where it's a common advanced strategy to use two or more operators to search and pounce and run a band at the same time. For more information, see the Flex Radio Systems website <https://www.flexradio.com/multiflex/>.

### Worked Zone 38 Award

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Lesotho, 7P. The 7P8LB Team is now well established as they near their departure date in a few weeks' time. Svein, LA3BO, Piotr, LA7RRA, Rune, LA7THA (Team Leader), Arne, LA7WCA, Svein Jarle, LA9KKA, Thor, LA9VPA, Harald, LB2HG, Chris, OE5CWO and Phillipp, OE7PGI will be active as 7P8LB from Molengoane Lodge (WW Loc. KG30VO), Lesotho, between 8 and 16 March. They plan to have 2 or 3 stations running 24/7 on all HF bands using CW, SSB, with the focus on low bands and FT8. QSL Manager is Charles, M0OXO. QSL is via M0OXO's OQRS [www.m0oxo.com/oqrs/logsearch.php](http://www.m0oxo.com/oqrs/logsearch.php). Log search can be found on Clublog: <https://clublog.org/logsearch/7P8LB>. Not in log: Use the busted call sign facility on the OQRS page. For more details and updates, see: <http://www.la9vpa.com/7p8lb/index.html>

### African DX

*Contacts with stations on the African continent count towards the SARL's All Africa Award* ([www.sarl.org.za/public/awards/awards.asp](http://www.sarl.org.za/public/awards/awards.asp))



Burundi, 9U. Shabu, M0KRI will be active as 9U4RI between 15 and 25 February operating CW and SSB on 40 to 10 meters. QSL via home call, direct.

Uganda, 5X. The Italian DXpedition Team (IDT) will be using the following call signs for their DXpedition to Uganda between 13 and 25 March: 5X3C (not 5X0T) for CW, SSB and RTTY 5X3E (not 5X0X) for FT8 QSL via I2YSB, direct, OQRS or LoTW. For more details on the IDT team and an online survey for "needs/wants", see

their Web page at <http://www.i2ysb.com/idt>

### African Islands

IOTA frequencies

CW: 28 040 24 920 21 040 18 098 14 040 10 114 7 030 3 530 kHz

SSB: 28 560 28 460 24 950 21 260 18 128 14 260 7 055 3 760 kHz

Rodriguez Island, 3B9. Vlad, UA4WHX, has active as 3B8VB from Rodriguez Island (AF-017). As always, the length of his stay is unknown. Look for activity on 40, 30, 20 and 17 metres using mostly CW with some SSB. QSL via UA4WHX.



Madeira, CT3. Henning, OZ1BII/OZ2I, will be active as CT9ABR from Porto Moniz, Maderia (AF-014) during the ARRL International DX CW Contest (16 and 17 February) as a Single-Op/Low-Power entry. He will be on the island between 14 and 17 February. Activity outside of the contest, he will sign CT3/OU2I and will only be CW only on the WARC-79 bands. QSL via OZ2I, direct or by the Bureau. Watch the following Web page for updates <https://sites.google.com/view/oz2i-oz1bii/news>

Cape Verde, D4. Philip, HB9HFD will be active from San Pedro as D44TAQ from 17 to 22 February with digital activity on 40 to 10 metres. QSL via LoTW.

Lampedusa Island, IG9. Members of the ARI Modena will be active as IG9MO from Lampedusa Island (AF-019) between 28 March and 2 April. Activity will be on various HF bands using CW, SSB, RTTY and other digital modes. They plan to be in the CQ WW WPX SSB Contest (30 and 31 March.) QSL via info on QRZ.com.

Djibouti, J2. The J20DX DXpedition team now includes Col MM0NDX, Jonathan MM0OKG and Christian EA3NT. They will operate with three stations as J20DX/p from the rare Sept-Freres Islands (AF-059) indicatively on 16 to 18/19 April and after that from Moucha Island (AF-053) for about 24 hours until early 20 April. They will also be active as J20DX/mm while at sea, and as J20DX from the mainland. Bookmark <https://j20dx.com/> for updates. QSL via Club Log's OQRS and LoTW; direct cards via MOSDV.

Los Farallones Island, CN. Toufelaz, CN8QY, is planning to lead a team to activate Los Farallones Island, Morocco (AF-118, new IOTA), between 25 and 30 July using the call sign 5C9A. the operators mentioned are Zidane, CN8CE, Toufelaz, CN8QY, Hamid, CN8HDZ, CN8PA, CN8PA, Ferti, CN8RAH, Leopoldo, I8LWL, Bruno, IK2PZG, Simon, IZ7ATN, Col, MM0NDX and possibly 1 or 2 more. They are looking for support. Details are on QRZ.com.

## Word to the Wise

Rat-race combiner – a device used to combine two in-phase signals with very minimal loss. It's constructed as a 1.5 wavelength ring of transmission line with input ports located 1/2 wavelength from one another, and an output port located at 1/4 wavelength between them [https://en.wikipedia.org/wiki/Rat-race\\_coupler](https://en.wikipedia.org/wiki/Rat-race_coupler). The transmission line should have a characteristic impedance of 1.44 times the system impedance. For example, for 50 ohm sources and loads, transmission line with a 72 ohm impedance should be used for the ring.

## Lectures on Radio Technology, History, and Applications

The MIT Radio Society (W1MX) put on a series of "Lectures on Radio Technology, History, and Applications" during the January IAP (Independent Activities Period), and they're available for your viewing pleasure on YouTube. Topics include SDRs, Propagation, Radar, and Space Weather. [www.youtube.com/playlist?list=PLWwWW7rc6eKh8xfLI4Pac7W9I54h7oj-B&disable\\_polymer=true](http://www.youtube.com/playlist?list=PLWwWW7rc6eKh8xfLI4Pac7W9I54h7oj-B&disable_polymer=true)

## Compare the signal to noise ratio

SP2BPD produced a YouTube video on how he uses a dual-channel SDR to compare the signal to noise ratio on two different receive antennas on 160 and 80 meters [www.youtube.com/watch?v=UzP03mZVLvE](http://www.youtube.com/watch?v=UzP03mZVLvE). Linrad is one of the tools that he uses for this task [www.sm5bsz.com/linuxdsp/usage/newco/newcomer.htm](http://www.sm5bsz.com/linuxdsp/usage/newco/newcomer.htm).

## Contest Calendar

This week's contests as compiled by Bruce Horn, WA7BNM. The period covered is 4 to 11 February 2019

RSGB 80 m Club SSB Championship  
20:00 - 21:30 UTC 4 February  
Geographic Focus: United Kingdom  
Participation: Worldwide  
Awards: United Kingdom  
Mode: SSB  
Bands: 80 m Only  
Classes: (none)  
Exchange: RS and serial no  
QSO Points: 1 point per QSO

Multipliers: (none)  
Score Calculation: (see rules)  
Submit logs by: 23:59 UTC 5 February 2019  
Upload log at: [www.rsgbcc.org/cgi-bin/hfenter.pl](http://www.rsgbcc.org/cgi-bin/hfenter.pl)  
Mail logs to: (none)  
Find rules at: [www.rsgbcc.org/hf/rules/2019/r80\\_mcc.shtml](http://www.rsgbcc.org/hf/rules/2019/r80_mcc.shtml)

ARS Spartan Sprint  
02:00 - 04:00 UTC 5 February

Geographic Focus: North America  
Participation: Worldwide  
Mode: CW  
Bands: 80, 40, 20, 15, 10 m  
Classes: Skinny; Tubby  
Max power: 5 watts  
Exchange: RST, state, province or country and power  
Work stations: Once per band  
Submit logs by: 7 February 2019  
E-mail logs to: [spartansprint@yahoo.com](mailto:spartansprint@yahoo.com)  
Mail logs to: (none)  
Find rules at:  
<http://arsgrp.blogspot.com/2009/02/so-whats-spartan-sprint-and-how-do-i.html>

QRP Fox Hunt  
02:00 - 03:30 UTC 6 February  
Geographic Focus: United States  
Participation: Worldwide  
Mode: CW  
Bands: 40 m Only  
Classes: Single Op - fox or hound  
Max power: 5 watts  
Exchange: RST, state, province or country, name and power output  
QSO Points: 1 point per QSO  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 03:30 UTC 7 February 2019  
E-mail logs to: (see rules)  
Mail logs to: (none)  
Find rules at:  
[www.grpfoxhunt.org/winter\\_rules.htm](http://www.grpfoxhunt.org/winter_rules.htm)

Phone Fray  
02:30 - 03:00 UTC 6 February  
Geographic Focus: North America  
Participation: Worldwide  
Mode: SSB  
Bands: 160, 80, 40, 20, 15 m  
Classes: Single Op  
Max power: 100 watts  
Exchange: NA: Name and state, province or country; non-NA: Name  
Work stations: Once per band  
QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station  
Multipliers: Each US state (including KH6/KL7) once per band; Each VE province/territory once per band; Each North American country (except W/VE) once per band  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 03:00 UTC 8 February 2019  
E-mail logs to: (none)  
Post log summary at: [www.3830scores.com](http://www.3830scores.com)

Mail logs to: (none)  
Find rules at:  
[www.perluma.com/Phone\\_Fray\\_Contest\\_Rules.pdf](http://www.perluma.com/Phone_Fray_Contest_Rules.pdf)

CWops Mini-CWT Test  
13:00 - 14:00 UTC and 19:00 - 20:00 UTC 6 February and 03:00 - 04:00 UTC 7 February  
Geographic Focus: Worldwide  
Participation: Worldwide  
Awards: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10 m  
Classes: Single Op - QRP, low or high  
Max power: HP: >100 watts; LP: 100 watts; QRP: 5 watts  
Exchange: Member: Name and member no; non-Member: Name and state, province or country  
Work stations: Once per band  
QSO Points: 1 point per QSO  
Multipliers: Each call once  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 04:00 UTC 9 February 2019  
Post log summary at: [www.3830scores.com](http://www.3830scores.com)  
Mail logs to: (none)  
Find rules at: <https://cwops.org/cwops-tests/>

UKEICC 80 m Contest  
20:00 - 21:00 UTC 6 February  
Geographic Focus: Europe  
Participation: Worldwide  
Mode: SSB  
Bands: 80 m Only  
Classes: Single Op Connected - QRP, low or high; Single Op Unconnected - QRP, low or high  
Max power: HP: 1 500 watts; LP: 100 watts; QRP: 5 watts  
Exchange: 4-Character grid square  
QSO Points: 1 point per 500 km (10 pts max); multiply QSO points by 2 if low power station; multiply QSO points by 4 if QRP station  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 22:00 UTC 6 February 2019  
E-mail logs to: (none)  
Upload log at: <http://logs.ukaicc.com/cgi-bin/hfenter.pl>  
Mail logs to: (none)  
Find rules at: [www.ukaicc.com/which-contest/which-contest-ukeicc-80-m-contests-rules](http://www.ukaicc.com/which-contest/which-contest-ukeicc-80-m-contests-rules)

NRAU 10 m Activity Contest  
18:00 - 19:00 UTC (CW) and 19:00 - 20:00 UTC (SSB) and 20:00 - 21:00 UTC (FM) and 21:00 - 22:00 UTC 7 February (Dig)  
Geographic Focus: Nordic Europe  
Participation: Worldwide

Mode: CW, SSB, FM, Digital  
Bands: 10 m Only  
Classes: (none)  
Exchange: RS(T) and 6-character grid square  
QSO Points: (see rules)  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 21 February 2019  
Upload log at:  
[http://ua9qcq.com/en/submit\\_log.php?lang=en](http://ua9qcq.com/en/submit_log.php?lang=en)  
Mail logs to: (none)  
Find rules at: [www.nrau.net/activity-contests/below-30mhz.html](http://www.nrau.net/activity-contests/below-30mhz.html)

SKCC Sprint Europe  
20:00 - 22:00 UTC 7 February  
Geographic Focus: Europe  
Participation: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10 m  
Classes: (none)  
Exchange: RST, state, province or country, name and SKCC no or power  
Work stations: Once per band  
QSO Points: (see rules)  
Multipliers: Each state, province, or country once  
Score Calculation: Total score = (total QSO points x total mults) and bonus points  
Submit logs by: 14 February 2019  
E-mail log summary to: (none)  
Post log summary at:  
[www.skccgroup.com/operating\\_activities/skse/submit-display.php?submit\\_id=165](http://www.skccgroup.com/operating_activities/skse/submit-display.php?submit_id=165)  
Mail logs to: (none)  
Find rules at:  
[www.skccgroup.com/operating\\_activities/skse/](http://www.skccgroup.com/operating_activities/skse/)

NCCC RTTY Sprint  
01:45 - 02:15 UTC 8 February  
Geographic Focus: North America  
Participation: Worldwide  
Mode: RTTY  
Bands: (see rules)  
Classes: (none)  
Exchange: Serial no, name and QTH  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 10 February 2019  
E-mail logs to: (none)  
Post log summary at: [www.3830scores.com/](http://www.3830scores.com/)  
Mail logs to: (none)  
Find rules at: [www.ncccsprint.com/rttyns.html](http://www.ncccsprint.com/rttyns.html)

QRP Fox Hunt  
02:00 - 03:30 UTC 8 February  
Geographic Focus: United States  
Participation: Worldwide

Mode: CW  
Bands: 80 m Only  
Classes: Single Op - fox or hound  
Max power: 5 watts  
Exchange: RST, state, province or country, name and power output  
QSO Points: 1 point per QSO  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 03:30 UTC 9 February 2019  
E-mail logs to: (see rules)  
Mail logs to: (none)  
Find rules at:  
[www.qrpfoxhunt.org/winter\\_rules.htm](http://www.qrpfoxhunt.org/winter_rules.htm)

NCCC Sprint Ladder  
02:30 - 03:00 UTC 8 February  
Geographic Focus: North America  
Participation: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10, 6 m  
Classes: Single Op  
Max power: 100 watts  
Exchange: Serial no, name and QTH  
Work stations: Once per band  
QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station  
Multipliers: Each US state (including KL7 and KH6) once per band; Each VE province once per band; Each North American country (except W/VE) once per band  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 10 February 2019  
E-mail logs to: (none)  
Post log summary at: [www.3830scores.com/](http://www.3830scores.com/)  
Mail logs to: (none)  
Find rules at: [www.ncccsprint.com/rules.html](http://www.ncccsprint.com/rules.html)

CQ WW RTTY WPX Contest  
00:00 UTC 9 February to 23:59 UTC 10 February  
Geographic Focus: Worldwide  
Participation: Worldwide  
Awards: Worldwide  
Mode: RTTY  
Bands: 80, 40, 20, 15, 10 m  
Classes: Single Op All Band - QRP, low or high; Single Op Single Band - QRP, low or high; Single Op Overlays – tri-bander or rookie; Multi-One – low or high; Multi-Two; Multi-Unlimited  
Max operating hours: Single Op: 30 hours, off times of at least 60 minutes; Multi-Op: 48 hours  
Max power: HP: 1 500 watts; LP: 100 watts; QRP: 5 watts  
Exchange: RST and serial no  
Work stations: Once per band



QSO Points: 1 point per QSO with same country on 20, 15, 10 m; 2 points per QSO with same country on 80, 40 m; 2 points per QSO with different countries on same continent on 20, 15, 10 m; 4 points per QSO with different countries on same continent on 80, 40 m; 3 points per QSO with different continent on 20, 15, 10 m; 6 points per QSO with different continent on 80, 40 m  
 Multipliers: Each prefix once  
 Score Calculation: Total score = total QSO points x total mults  
 Submit logs by: 23:59 UTC 15 February 2019  
 E-mail logs to: [rtty@cqwpx.com](mailto:rtty@cqwpx.com)  
 Upload log at: [www.cqwpx.com/logcheck/](http://www.cqwpx.com/logcheck/)  
 Mail logs to: CQ WPX RTTY Contest, PO Box 1877, Los Gatos, CA 95031-1877, USA  
 Find rules at: [www.cqwxprtty.com/rules.htm](http://www.cqwxprtty.com/rules.htm)

SARL Field Day Contest  
 10:00 UTC 9 February to 10:00 UTC 10 February  
 Geographic Focus: South Africa  
 Participation: Worldwide  
 Mode: CW, SSB, Digital  
 Bands: 160, 80, 40, 20, 15, 10 m  
 Classes: Single-Op Field - QRP or high; Multi-Op Field - QRP or high; Ultra-Light Portable; General  
 Max power: QRP: 5 watts; non-QRP: >5 watts  
 Exchange: Number of transmitters, Category (see rules) and Province (or "DX")  
 Work stations: Once per band per mode  
 QSO Points: (see rules)  
 Multipliers: (see rules)  
 Score Calculation: (see rules)  
 Submit logs by: 17 February 2019  
 E-mail logs to: [contest@sarl.org.za](mailto:contest@sarl.org.za)  
 Mail logs to: None  
 Find rules at: [www.sarl.org.za/Web3/Members/DoDocDownload.aspx?X=201812010726248P1Jfp4GJT.PDF](http://www.sarl.org.za/Web3/Members/DoDocDownload.aspx?X=201812010726248P1Jfp4GJT.PDF)

Asia-Pacific Spring CW Sprint  
 11:00 - 13:00 UTC 9 February  
 Geographic Focus: Asia/Pacific  
 Participation: Worldwide  
 Mode: CW  
 Bands: 40, 20 m  
 Classes: Single Op Single Radio  
 Max power: legal limit in each country  
 Exchange: RST and serial no  
 Work stations: Once per band  
 QSO Points: Asia-Pacific: 1 point per QSO; Non-Asia-Pacific: 1 point per QSO with an Asia-Pacific station  
 Multipliers: Each prefix once  
 Score Calculation: Total score = total QSO points x total mults  
 Submit logs by: 16 February 2019  
 E-mail logs to: [apsprint@jsfc.org](mailto:apsprint@jsfc.org)

Mail logs to: (none)  
 Find rules at: <http://jsfc.org/apsprint/aprule.txt>

SKCC Weekend Sprintathon  
 12:00 UTC 9 February to 24:00 UTC 10 February  
 Geographic Focus: Worldwide  
 Participation: Worldwide  
 Awards: Worldwide  
 Mode: CW  
 Bands: 160, 80, 40, 20, 15, 10, 6 m  
 Classes: (none)  
 Max operating hours: 24  
 Exchange: RST, state, province or country, name and SKCC no or none  
 Work stations: Once per band  
 QSO Points: 1 point per QSO  
 Bonus Points: (see rules)  
 Multipliers: Each state, province, or country once  
 Score Calculation: Total score = (total QSO points x total mults) and bonus points  
 Submit logs by: 17 February 2019  
 Post log summary at: [www.skccgroup.com/operating\\_activities/weekend\\_sprintathon/submit-display.php](http://www.skccgroup.com/operating_activities/weekend_sprintathon/submit-display.php)  
 Mail logs to: (none)  
 Find rules at: [www.skccgroup.com/operating\\_activities/weekend\\_sprintathon/](http://www.skccgroup.com/operating_activities/weekend_sprintathon/)

KCJ Topband Contest  
 12:00 UTC 9 February to 12:00 UTC 10 February  
 Geographic Focus: Worldwide  
 Participation: Worldwide  
 Mode: CW  
 Bands: 160 m Only  
 Classes: Single Op  
 Multi-Op  
 Exchange: JA: RST and Prefecture/District Code; non-JA: RST and Continent Code (AF, AS, EU, NA, OC, SA)  
 QSO Points: JA: 1 point per QSO with JA station; JA: 5 points per QSO with non-JA station; Non-JA: 1 point per QSO with JA station  
 Multipliers: Each JA prefecture/district; JA: each continent  
 Score Calculation: Total score = total QSO points x total mults  
 Submit logs by: 28 February 2019  
 E-mail logs to: [2019toptest@kcj-cw.com](mailto:2019toptest@kcj-cw.com)  
 Mail logs to: T. Nakamura, Shinden-Nakamachi 4-7, Daito city, nOsaka 574-0056, Japan  
 Find rules at: [www.kcj-cw.com/contest/19\\_toptest\\_rules\\_e.pdf](http://www.kcj-cw.com/contest/19_toptest_rules_e.pdf)

Dutch PACC Contest  
 12:00 UTC 9 February to 12:00 UTC 10 February  
 Mode: CW, SSB

Bands: 160, 80, 40, 20, 15, 10 m  
 Classes: SOAB – CW, SSB or mixed – low or high;  
 SOAB Mixed QRP; Multi-One Mixed - PA only;  
 Multi-Two Mixed - PA only; Multi-Unlimited Mixed;  
 Single Op Single Band CW; Single Op Single Band  
 SSB; SWL  
 Max power: HP: >100 watts; LP: 100 watts; QRP: 5  
 watts  
 Exchange: PA: RS(T) and province; non-PA: RS(T)  
 and serial no  
 Work stations: Once per band per mode  
 QSO Points: 1 point per QSO with a PA station  
 Multipliers: PA provinces once per band per mode  
 Score Calculation: Total score = total QSO points x  
 total mults  
 Submit logs by: 15 March 2019  
 E-mail logs to: [pacc@dutchpacc.com](mailto:pacc@dutchpacc.com)  
 Upload log at:  
<http://server4.veronict.nl:81/WebEditor/app>  
 Mail logs to: PACC Contest Manager, c/o VERON  
 Central Bureau, PO Box 1166, 6801 BD Arnhem, The  
 Netherlands  
 Find rules at: <http://pacc.veron.nl/>

YLRL YL-OM Contest  
 14:00 UTC 9 February to 02:00 UTC 11 February  
 Geographic Focus: Worldwide  
 Participation: Worldwide  
 Mode: CW/Digital, SSB  
 Bands: All  
 Classes: (none)  
 Max operating hours: 24 hours  
 Max power: HP: >100 watts; LP: 100 watts; QRP: 5  
 watts  
 Exchange: QSO no, RS(T) and section, province or  
 country  
 Work stations: Once per band per mode  
 QSO Points: 1 point per QSO  
 Multipliers: Each section, province, country once  
 per mode; Power factor: x 3 for QRP, x 1.5 for LP  
 Score Calculation: Total score = total QSO points x  
 total mults x power factor  
 Submit logs by: 12 March 2019  
 E-mail logs to: [ac7uh@arri.net](mailto:ac7uh@arri.net)  
 Mail logs to: Barbara Yasson, AC7UH, 13205 NE 5th  
 Ave., Vancouver, WA 98685, USA  
 Find rules at: [http://ylrl.org/index.php/contests-  
 and-dx-awards](http://ylrl.org/index.php/contests-and-dx-awards)

OMISS QSO Party  
 15:00 UTC 9 February to 15:00 UTC 10 February  
 Mode: SSB  
 Bands: 160, 80, 40, 20, 15, 10 m  
 Classes: Single Op  
 Exchange: RS, state, province or DX and OMISS no if  
 member  
 Work stations: Once per band

QSO Points: 2 points per QSO with OMISS member;  
 1 point per QSO with non-member; Bonus: add 500  
 points to score if mobile for entire contest  
 Multipliers: Each US state once; Each VE province  
 once; 1 DX country once  
 Power: <5 W = x 3, 100 W = x 2, >100 W = x 1  
 Score Calculation: Total score = (total QSO points x  
 total mults x power mult) and bonus points  
 Submit logs by: 1 March 2019  
 E-mail logs to: (none)  
 Upload log at:  
[www.omiss.net/Facelift/qsoElectronic.php](http://www.omiss.net/Facelift/qsoElectronic.php)  
 Mail logs to: (none)  
 Find rules at: [www.omiss.net/Facelift/qsoparty.php](http://www.omiss.net/Facelift/qsoparty.php)

FISTS Winter Unlimited Sprint  
 17:00 - 21:00 UTC 9 February  
 Geographic Focus: United States/Canada  
 Participation: Worldwide  
 Awards: United States/Canada  
 Mode: CW  
 Bands: 80, 40, 20, 15, 10 m  
 Classes: QRP; QRO; Club  
 Max power: QRO: 100 watts; QRP: 5 watts  
 Exchange: FISTS: RST, state, province or country,  
 first name and FISTS no; non-FISTS: RST, state,  
 province or country, first name and power  
 Work stations: Once per band  
 QSO Points: 5 points per QSO with FIST member;  
 FIST members: 2 points per QSO with non-FIST  
 member  
 Multipliers: Each US state and VE province once;  
 Each DXCC country once  
 Score Calculation: Total score = total QSO points x  
 total mults  
 Submit logs by: 11 March 2019  
 E-mail logs to: [kc2lsd@fistsna.org](mailto:kc2lsd@fistsna.org)  
 Mail logs to: FISTS Sprint Log, c/o Cody Codianni  
 KC2LSD, 413 Martin Court, Leonardo, NJ 07737-  
 1317, USA  
 Find rules at:  
<http://fistsna.org/operating.html#sprints>

RSGB 1,8 MHz Contest  
 19:00 - 23:00 UTC 9 February  
 Mode: CW  
 Bands: 160 m Only  
 Classes: Single Op – UK or overseas – assisted or  
 unassisted  
 Max power: 400 watts  
 Exchange: UK: RST, serial no and district code; non-  
 UK: RST and serial no  
 QSO Points: 2 points per QSO; 5 additional points  
 for first QSO with each UK district; UK stations: 5  
 additional points for first QSO with each country  
 outside of UK  
 Multipliers: (none)

Score Calculation: Total score = total QSO points  
Submit logs by: 23:59 UTC 10 February 2019  
Upload log at: [www.rsgbcc.org/cgi-bin/hfenter.pl](http://www.rsgbcc.org/cgi-bin/hfenter.pl)  
Mail logs to: (none)  
Find rules at:  
[www.rsgbcc.org/hf/rules/2019/r160m.shtml](http://www.rsgbcc.org/hf/rules/2019/r160m.shtml)

Balkan HF Contest  
13:00 - 17:00 UTC 10 February  
Mode: CW, SSB  
Bands: 80, 40 m  
Classes: Category A; Category B  
Max power: Cat A: 1 000 W input; Cat B: 10 W input  
Exchange: RS(T) and QSO no  
Work stations: Once per band  
QSO Points: 1 point per QSO with category A; 2 points per QSO with category B  
Multipliers: Each Balkan prefix once per band  
Score Calculation: Total score = (total 80 m QSO points x total 80 m mults) and (total 40 m QSO points x total 40 m mults)  
Submit logs by: 17 February 2019  
E-mail logs to: (none)  
Upload log at:  
[www.hamyo.ro/balkanhf2019/upload\\_log.php](http://www.hamyo.ro/balkanhf2019/upload_log.php)  
Mail logs to: (none)  
Find rules at: <http://hamyo.ro/balkanhf2019/>

CQC Winter QSO Party  
01:00 - 02:59 UTC 11 February  
Geographic Focus: Worldwide  
Participation: Worldwide  
Mode: CW  
Bands: 80, 40, 20 m  
Classes: (none)  
Max power: 5 watts  
Exchange: RST and state, province or country  
Work stations: Once per band  
QSO Points: 1 point per QSO; Bonus: 5 points per QSO with W0CQC or N0CQC  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 13 March 2019  
E-mail logs to: [vkumagai@q.com](mailto:vkumagai@q.com)  
Mail logs to: (none)  
Find rules at:  
[www.coloradoqrpclub.org/contests/winter.htm](http://www.coloradoqrpclub.org/contests/winter.htm)

4 States QRP Group Second Sunday Sprint  
01:00 - 03:00 UTC 11 February  
Geographic Focus: North America  
Participation: Worldwide  
Mode: CW, SSB  
Bands: 160, 80, 40, 20, 15, 10 m  
Classes: Single Op  
Exchange: Member: RS(T), state, province or country and member no; Non-member: RS(T), state, province or country and power  
Work stations: Once per band  
QSO Points: 1 point per QSO with non-member; 2 points per QSO with member  
Multipliers: (none)  
Score Calculation: Total score = total QSO points  
Submit logs by: 13 February 2019  
E-mail logs to: (none)  
Post log summary at: <http://qrcontest.com/4sqrp>  
Mail logs to: (none)  
Find rules at: [www.4sqrp.com/SSS/sss\\_rules.pdf](http://www.4sqrp.com/SSS/sss_rules.pdf)

ARRL School Club Roundup  
13:00 UTC 11 February to 23:59 UTC 15 February  
Geographic Focus: Worldwide  
Participation: Worldwide  
Mode: CW, Phone, RTTY/Digital  
Bands: All, except 60, 30, 17, 12 m  
Classes: Single Op (I); Club/Multi-Op (C); School Club/Group (S)  
Max operating hours: 24 hours total; 6 hours out of any 24-hour period with off times of at least 30 minutes  
Exchange: RS(T), Class (I, C or S) and state, province or country  
Work stations: Once per mode  
QSO Points: 1 point per phone QSO; 2 points per CW/RTTY/digital QSO  
Multipliers: States and VE provinces and DXCC countries and (2x class C QSOs) and (5x class S QSOs)  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 2 March 2019  
Post log summary at:  
<http://contests.arrl.org/scoresubmission.php>  
Mail logs to: School Club Roundup; c/o LIMARC; PO Box 392; Levittown, NY 11756; USA  
Find rules at: [www.arrl.org/school-club-roundup](http://www.arrl.org/school-club-roundup)

## Operating Tip

FT8 - Take Advantage of It Without Using It - regardless of how you feel about using FT8 for making contacts, you can use all of the activity and automated signal reporting to help understand what bands are currently open. You can become familiar with the pskreporter.info website <http://pskreporter.info/>, where an interactive map <https://www.pskreporter.info/pskmap.html> can show you various bands and paths that are open, relative signal levels and so on.



## Using voice recognition to control radio settings

Icom engineers were testing different methods of using voice recognition to control radio settings and some of the results were presented at the Tokyo Hamfair [http://www.fbnews.jp/201810/fblabo\\_en/](http://www.fbnews.jp/201810/fblabo_en/). Two methods of control were explored. In the "direct" case, hardware attached to the radio had all of the necessary processing to directly control the radio. In the "cloud" case, they built an Alexa skill, which runs in the cloud to communicate with a Raspberry Pi connected locally to an Icom radio. The radio was controlled by speaking phrases such as, "Alexa, set the frequency to 7 megahertz."

## RTTY and FSK

JA7UDE released an external driver program that allows the popular RTTY software MMTTY to perform FSK keying <https://www.qsl.net/ja7ude/tinyfsk/index.html>. With the addition of his program and a little configuration, you'll be able to use K3NG's TinyFSK software <http://www.frontiernet.net/~aflowers/tinyfsk/> with MORTTY hardware <http://hamprojects.info/mortty/>, or build your own.

## HF and Ice sheets

At HF frequencies, ice sheets are relatively transparent. Researchers exploit this characteristic to sound the surface of landmasses covered in ice using various towed-behind antennas and airplanes to determine the ice thickness <https://www.mdpi.com/2076-3263/8/5/182/htm>. Anecdotally, radials for HF antennas placed on the surface of ice have been found to behave more like elevated radials.

## Next Week's Contests

NAQCC CW Sprint, 01:30 - 03:30 UTC 13 February  
QRP Fox Hunt, 02:00 - 03:30 UTC 13 February  
Phone Fray, 02:30 - 03:00 UTC 13 February  
CWops Mini-CWT Test, 13:00 - 14:00 UTC and 19:00 - 20:00 UTC 13 February and 03:00 - 04:00 UTC 14 February  
RSGB 80 m Club Championship, Data, 20:00 - 21:30 UTC 13 February  
PODXS 070 Club Valentine Sprint, 00:00 - 23:59 UTC 14 February  
NCCC RTTY Sprint 01:45 - 02:15 UTC 15 February  
QRP Fox Hunt, 02:00 - 03:30 UTC 15 February  
NCCC Sprint Ladder, 02:30 - 03:00 UTC 15 February  
ARRL International DX CW Contest, 00:00 UTC 16 February to 24:00 UTC 17 February  
Russian PSK WW Contest, 12:00 UTC 16 February to 11:59 UTC 17 February  
Feld Hell Sprint, 19:00 - 20:59 UTC 17 February  
AWA Amplitude Modulation QSO Party, 23:00 UTC 16 February to 23:00 UTC 17 February  
Run for the Bacon QRP Contest, 02:00 - 04:00 UTC 18 February

*Items used with acknowledgement to the ARRL Letter, the ARRL DX News, the ARRL Contest Update, OPDX Bulletin, 425 DX Bulletin, DXNL Newsletter, WIA-News, the RSGB News, DxCoffee, Southgate ARC News, DX World and the Amateur Radio Newsletter*